

of exact investigation. The author has succeeded in obtaining a considerable proportion of it from dried walnut leaves, which yield very nearly three grammes per kilogramme. For the method of extraction, we must refer to the original memoir. The composition of the crystallized substance is $C^6H^{12}O^6$ with two molecules of water, which are lost at 110° . Its chemical properties—the action of reducing and oxidizing agents assign to it the structure $C^6H^6(OH)^6$, and show it to be hexoxyhexhydrobenzene. W. H. G.

FORMATION OF HYDROGEN SILICIDE AS A CLASS EXPERIMENT. By A. Mermet (*Bul. Soc. Chim.*, **47**, 306).—The preparation of pure hydrogen silicide as a class experiment is tedious and difficult. Its spontaneous combustibility may be quickly and easily shown as follows: A piece of magnesium ribbon 2 or 3 centimetres long is introduced into a clean, dry, glass tube, 4 or 5 millimetres in diameter and 5 or 6 centimetres long and closed at one end. It is then heated in the Bunsen flame until a bright incandescence shows that a portion of the silica of the glass has been reduced by the magnesium; the magnesium silicide formed covers the bottom of the tube with a black deposit. Before the tube has become entirely cold, a few drops of hydrochloric acid are introduced. Instantly there is a disengagement of hydrogen mixed with hydrogen silicide, and the bubbles take fire at the mouth of the tube, producing a crackling sound and a white smoke of silica. W. H. G.

HOPEINE. (This JOURNAL, **123**, 419).—The hopeine claimed to have been discovered in wild hops by Williamson, has been shown by Ladenburg (*Berl. Ber.*, **19**, 783,) to be a mixture of morphine with another more soluble base. B. H. Paul (*Pharm. Jour.*, **111**, 877), and C. Lenken (*Chem. Zeitung*, **10**, 553,) have found that the other base is in all probability cocaine. W. H. G.

MELTING POINT OF MAGNESIUM. Victor Meyer (*Berl. Ber.*, **20**, 497).—The text books give (about) 500° as the melting point of magnesium, a temperature which does not agree with the observations of several manufacturers who pointed out the fact to the author. Experiments have shown that when heated in an atmosphere of hydrogen, magnesium melts almost simultaneously with sodium hydroxide, of which the fusing point is 800° . That of magnesium is very little below the latter temperature. W. H. G.

ON THE DESSICATION OF GASES.—J. D. van der Plaats (*Rec. Trav. Chim.*, **6**, 45,) has published a review of the literature on the dessicating agents employed for gases, and concludes that sulphuric acid diluted with six or eight per cent. of water is preferable in all cases in which neither absorption nor combination takes place. Special attention is directed to the importance of repeatedly calcining with sulphuric acid the pumice used for gaining absorbing surface in order to decompose chlorides and fluorides, and washing between the calcinations with dilute sulphuric acid. The U-tubes employed should be drawn out and bent for connections after the pumice and acid have been introduced, or if a cork be employed it should be on the side by which the gas is introduced, and should be covered with good sealing wax. Caoutchouc tubes used for connections should be dried in the dark over sulphuric acid, and should be thick like those used for filter pumps, in